



Analytical Laboratory Report

Report ID: S16048.01(01)
Generated on 08/07/2020

Report to

Attention: Hallie Serazin
Stantec Consulting
3754 Ranchero Dr.
Ann Arbor, MI 48108

Phone: 614-477-9898 FAX:
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Additional Contacts: Mark Pascoe

Report produced by

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Report Summary

Lab Sample ID(s): S16048.01-S16048.03
Project: Monitoring
Collected Date(s): 07/27/2020
Submitted Date/Time: 07/28/2020 10:15
Sampled by: Jacob F
P.O. #:

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Maya Murshak
Technical Director



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General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

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Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

Report Narrative

There is no additional narrative for this analytical report



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Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



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Method Summary

Method	Version
SW3050B	SW 846 Method 3050B Revision 2 December 1996
SW6020A	SW 846 Method 6020A Revision 1 February 2007



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Sample Summary (3 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S16048.01	A	Soil	07/27/20 10:00
S16048.02	B	Soil	07/27/20 10:15
S16048.03	C	Soil	07/27/20 10:30



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Lab Sample ID: S16048.01

Sample Tag: A

Collected Date/Time: 07/27/2020 10:00

Matrix: Soil

COC Reference: 134771

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Plastic Bag	None	Yes	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	08/05/20 09:00	JRH	

Metals

Method: SW6020A, Run Date: 08/05/20 10:43, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.43	0.20		mg/kg	214	7440-38-2	

Other / Misc.

Method: , Run Date: 08/03/20 12:00, Analyst: IKM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		i

i-Incremental sampling



Analytical Laboratory Report

Lab Sample ID: S16048.02

Sample Tag: B

Collected Date/Time: 07/27/2020 10:15

Matrix: Soil

COC Reference: 134771

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Plastic Bag	None	Yes	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	08/05/20 09:00	JRH	

Metals

Method: SW6020A, Run Date: 08/05/20 10:44, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.42	0.20		mg/kg	218	7440-38-2	

Other / Misc.

Method: , Run Date: 08/03/20 12:00, Analyst: IKM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		i

i-Incremental sampling



Analytical Laboratory Report

Lab Sample ID: S16048.03

Sample Tag: C

Collected Date/Time: 07/27/2020 10:30

Matrix: Soil

COC Reference: 134771

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Plastic Bag	None	Yes	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	08/05/20 09:00	JRH	

Metals

Method: SW6020A, Run Date: 08/05/20 10:46, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.38	0.20		mg/kg	213	7440-38-2	

Other / Misc.

Method: , Run Date: 08/03/20 12:00, Analyst: IKM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		i

i-Incremental sampling

Merit Laboratories Login Checklist

Lab Set ID:S16048

Client:STANTEC_MI (Stantec Consulting)

Project: Monitoring

Submitted:07/28/2020 10:15 Login User: SRS

Attention: Hallie Serazin

Address: Stantec Consulting
3754 Ranchero Dr.
Ann Arbor, MI 48108

Phone: 614-477-9898

FAX:

Email: Hallie.Serazin@stantec.com

Selection	Description	Note
Sample Receiving		
01.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples are received at 4C +/- 2C Thermometer # RT
02.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Received on ice/ cooling process begun
03.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples shipped FedEx
04.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples left in 24 hr. drop box
05.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC adequately filled out
07.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC signed and relinquished to the lab
08.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sample tag on bottles match COC
09.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Subcontracting needed? Subcontracted to:
Preservation		
10.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Do sample have correct chemical preservation
11.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Completed pH checks on preserved samples? (no VOAs)
12.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	All bottles intact
14.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Appropriate analytical bottles are used
15.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Merit bottles used
16.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sufficient sample volume received
17.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples require laboratory filtration
18.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples submitted within holding time
19.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



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 www.meritlabs.com

C.O.C. PAGE # 1 OF 1 134771

REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME: Mark Pascoe
 COMPANY: Stantec
 ADDRESS: 3754 Ranchero Dr.
 CITY: Ann Arbor STATE: MI ZIP CODE: 48108
 PHONE NO.: 734-761-1010 P.O. NO.: _____ FAX NO.: _____
 E-MAIL ADDRESS: mark.pascoe@stantec.com QUOTE NO.: _____

CONTACT NAME: SAME
 COMPANY: _____
 ADDRESS: _____
 CITY: _____ STATE: _____ ZIP CODE: _____
 PHONE NO.: _____ E-MAIL ADDRESS: _____

PROJECT NO./NAME: _____ SAMPLER(S) - PLEASE PRINT/SIGN NAME: Jacob Fielder
 TURNAROUND TIME REQUIRED: 1 DAY 2 DAYS 3 DAYS STANDARD OTHER _____
 DELIVERABLES REQUIRED: STD LEVEL II LEVEL III LEVEL IV EDD OTHER _____

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER
	DATE	TIME										
<u>14048.01</u>	<u>7/27/20</u>	<u>1000</u>	<u>A</u>	<u>S</u>	<u>1</u>							
<u>.02</u>	<u>7/27/20</u>	<u>1015</u>	<u>B</u>	<u>S</u>	<u>1</u>							
<u>.03</u>	<u>7/27/20</u>	<u>1030</u>	<u>C</u>	<u>S</u>	<u>1</u>							

Containers & Preservatives: _____
 Certifications: OHIO VAP Drinking Water
 DoD NPDES
 Project Locations: Detroit New York
 Other _____
 Special Instructions: _____

ISM metals

RELINQUISHED BY: Jacob Fielder / Stantec Sampler DATE: 7/27/20 TIME: 1400
 RECEIVED BY: _____ DATE: _____ TIME: _____

RELINQUISHED BY: _____ DATE: _____ TIME: _____
 RECEIVED BY: _____ DATE: _____ TIME: _____

RELINQUISHED BY: Feder DATE: 7/28/20 TIME: 1015
 RECEIVED BY: Smignati DATE: 7/28/20 TIME: 1015

SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____
 NOTES: PT TEMP. ON ARRIVAL _____